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10/511,572	10/13/2004	Tomoaki Ito	00682P00700US	4505

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WOOD, PHILLIPS, KATZ, CLARK & MORTIMER  
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EXAMINER

ROMAN, LUIS ENRIQUE

ART UNIT PAPER NUMBER

2836

DATE MAILED: 11/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/511,572

Applicant(s)

ITO, TOMOAKI

Examiner

Luis Roman

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1,2 and 4-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### **DETAILED ACTION**

Applicant amendment filed on 08/07/06 has been entered. Accordingly claim 2 has been kept original, claims 1, 4-6 have been amended and claim 3 has been cancelled. New claims 7-19 were added. It also included remarks/arguments.

#### ***Claim Objections***

**Claim 4** is dependent on claim 3 now cancelled.

In order to examine the claim the examiner will consider this claim dependent from claim 1.

#### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 1, 2, 4, 9, 10, 13, 14, 17, 18 & 19** are rejected under 35 U.S.C. §103(a) as being unpatentable over Helfrick (US 4730230) in view of Schultz et al. (US 5959824) and Ono Hiroaki (JP 11-193084).

Regarding claim 1 Helfrick discloses a recorded data eraser for a magnetic storage device defining in a main body thereof a cavity for insertion of the magnetic storage device in the cavity (Abstract) and comprising: a generator for generating a magnetic field so as to erase recorded data in the device inserted in the insertion cavity

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(Col. 4 lines 20-27); and a magnetic body arranged within the magnetic field generated by the generator (Col. 4 lines 53-57).

Helfrick discloses a casing with a coil but not specifically encircling the magnetic storage device inserted in the insertion cavity and a direct-current power supply circuit for exciting the coil wherein the main body is a casing with an opening for the insertion of the storage device and having a coil wound around the outer periphery of the hollow coil spool.

Schultz et al. teaches wherein the generator comprises a coil arranged so as to encircle the magnetic storage device inserted in the insertion cavity (Figure 2) and a direct-current power supply circuit for exciting the coil (Col. 2 lines 37-46 & Col. 9 lines 64-67) wherein the main body is a casing with an opening for the insertion of the storage device and having a coil wound around the outer periphery of the hollow coil spool (Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device with the Schultz et al. teachings because this way the eraser covers the magnetic storage in its totality to assure a highly reliable erasing of the data recorded. Moreover, the direct current erasing protects the medium against dispersion of initial magnetization.

Helfrick device has a coil and a drawer to insert the magnetic device. These need an structure where to sit but its not expressly disclosed.

Ono Hiroaki teaches a casing (Fig. 1)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device in view Schultz et al. with the Ono Hiroaki teachings because prevents leakage incidence of magnetically recorded data to the outsider from occurring (Ono Hiroaki<Abstract>).

Regarding claim 2 Helfrick in view of Schultz et al. discloses the recorded data eraser as defined in claim 1.

Helfrick further discloses adapted to maintain a magnetic flux density in the insertion cavity within the range of 6,000 to 15,000 gauss in erasing data in the device (Col. 6

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lines 1-13). One of the basic formulas of magnetism teaches that  $B = \mu \cdot H$ ; where  $B$  is the magnetic induction [Gauss],  $\mu$  is the permeability and  $H$  is the magnetic coercivity [Oersteds]. In the case of air  $\mu = 1$  for most materials this value is 1.25 or greater. As a result a magnetic coercivity of 5,000 Oersteds will result in 6,000 Gauss or greater magnetic induction.

Regarding claim 14 Helfrick in view of Schultz et al. discloses the recorded data eraser as defined in claim 1.

Helfrick further teaches wherein there is a flange on the coil that is inserted and fits in the opening in the front end of the casing (Fig. 1).

Regarding claim 19 Helfrick discloses a recorder data eraser for a magnetic storage device defining in a main body thereof a cavity for insertion of a magnetic storage device in the cavity and comprising: wherein the main body of the eraser comprises a casing of a box shape having a front end with an opening, the casing functioning as the magnetic body, the opening in the front end of the casing arranged so that a magnetic storage device is directed through the opening in the front end of the casing into the insertion cavity and through the coil to be surrounded by the coil (Fig. 1). Schultz et al. teaches a generator for generating a magnetic field so as to erase recorded data in a device inserted in the insertion cavity (Fig. 2); and a magnetic body arranged within the magnetic field generated by the generator, wherein the generator comprises a coil arranged so as to encircle a magnetic storage device inserted in the insertion cavity (Fig. 2) and a direct current power supply circuit for exciting the coil (Col. 2 lines 37-46 & col. 9 lines 64-67).

Regarding claims 4, 9, 10, 13, 17, 18 Helfrick in view of Schultz et al. discloses the recorded data eraser as defined in claims above.

Helfrick discloses wherein the main body of the eraser further comprises a drawer for closing the opening of the casing openably and closably (Col. 4 lines 25-29).

Helfrick in view of Schultz et al. does not disclose wherein the lid functions together with the casing as the magnetic body.

Ono Hiroaki teaches a housing device for magnetic recording article wherein the lid functions together with the casing as the magnetic body (Fig. 1 element 13a).

Regarding claim 9 Ono Hiroaki further discloses wherein the magnetic body and lid cooperatively fully enclose the cavity (Fig. 1).

Regarding claim 10 Ono Hiroaki further discloses wherein the lid is mounted for movement relative to the casing by a hinge (Fig. 1).

Regarding claim 13 Schultz et al. discloses wherein the casing and lid are made from paramagnetic material (such as aluminum) (Col. 4 lines 30-34).

Regarding claim 17 Ono Hiroaki further discloses wherein there is an outer plastic covering on the casing (Paragraph [0017] English Translation).

Regarding claim 18 Ono Hiroaki further discloses wherein the outer plastic covering extends around the opening in the front end of the casing (Fig. 1 element 13b).

**Claims 5** is rejected under 35 U.S.C. §103(a) as being unpatentable over Helfrick (US 4730230) in view of Schultz et al. (US 5959824) and Golikov et al. (DERWENT 1996-170511).

Regarding claim 5 Helfrick in view of Schultz et al. discloses the recorded data eraser as defined in claim 1.

Schultz et al. discloses a direct-current converter for converting an alternating current into a direct current of a predetermined voltage and a demagnetization coil (Col. 2 lines 37-46 & Col. 9 lines 64-67 & Fig. 3 elements 24, 42), and a switching device (Fig. 3 element 52).

Helfrick in view of Schultz et al. does not disclose a capacitor charged by an electric power supply from the current converter and connected in parallel with the coil, an a reactor interposed in an input line from the direct-current converter to the capacitor.

Golikov et al. teaches a capacitor charged by an electric power supply from the current converter (Fig. element 4) connected in parallel with the coil, a reactor interposed in an

input line from the direct-current converter to the capacitor (Fig. inductor on top-left of element 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device in view Schultz et al. with the Golikov et al. teachings because introduces smoothing to the direct-current eliminating ripple.

**Claim 6, 7, 8, 15, 16** are rejected under 35 U.S.C. §103(a) as being unpatentable over Helfrick (US 4730230) in view of Schultz et al. (US 5959824), Ono Hiroaki (JP 11-193084) and Golikov et al. (DERWENT 1996-170511).

Regarding claims 6, 7, 8, 15, 16 Helfrick in view of Schultz et al. and Ono Hiroaki discloses the recorded data eraser as defined in claims above.

Schultz et al. further discloses a direct-current converter for converting an alternating current into a direct current of a predetermined voltage and a demagnetization coil (Col. 2 lines 37-46 & Col. 9 lines 64-67 & Fig. 3 elements 24, 42), and a switching device (Fig. 3 element 52).

Helfrick in view of Schultz et al. and Ono Hiroaki does not disclose a capacitor charged by an electric power supply from the current converter and connected in parallel with the coil, an a reactor interposed in an input line from the direct-current converter to the capacitor.

Golikov et al. teaches a capacitor charged by an electric power supply from the current converter (Fig. element 4) connected in parallel with the coil, a reactor interposed in an input line from the direct-current converter to the capacitor (Fig. inductor on top-left of element 4).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device in view Schultz et al. and Ono Hiroaki with the Golikov et al. teachings because introduces smoothing to the direct-current eliminating ripple.

Regarding claim 7 Ono Hiroaki discloses the device above in combination with a magnetic storage device (Fig. 1 elements A1, A2).

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Regarding claim 8 Ono Hiroaki discloses wherein the magnetic storage device is contained entirely within the insertion cavity (Fig. 1).

Regarding claim 15 Helfrick further discloses comprising a supporter upon which the magnetic storage device is placed (Fig. 1 element 30).

Regarding claim 16 Helfrick further discloses wherein the supporter is selectively movable into and out of the insertion cavity (Fig. 1 element 30).

**Claim 11** is rejected under 35 U.S.C. §103(a) as being unpatentable over Helfrick (US 4730230) in view of Schultz et al. (US 5959824) and Hobbs (US 4104559).

Regarding claim 11 Helfrick in view of Schultz et al. discloses the recorded data eraser as defined in claim 1.

Helfrick in view of Schultz et al. does not disclose wherein the insertion cavity has a flat cylindrical shape.

Hobbs teaches wherein the insertion cavity has a flat cylindrical shape (Col. 1 lines 44-50 & Fig. 1 element 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device in view Schultz et al. with the Hobbs teachings because the entire assembly may be enclosed in a housing, a material of which may be chosen to shield the magnetron, magnetically, from the surrounding environment; thus reducing or practically eliminating undesired influences of the magnetic structure upon other apparatus or devices.

**Claim 12** is rejected under 35 U.S.C. §103(a) as being unpatentable over Helfrick (US 4730230) in view of Schultz et al. (US 5959824) and Ono Hiroaki (JP 11-193084) and Faria et al. (US 6783070).

Regarding claims 12 Helfrick in view of Schultz et al. and Ono Hiroaki discloses the recorded data eraser as defined in claim 4.



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Helfrick in view of Schultz et al. and Ono Hiroaki disclose wherein the casing and lid are made from ferromagnetic materials.

Faria et al. discloses a device that operates with magnetic media inside a housing made of ferromagnetic material (Claim 6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the Helfrick device in view Schultz et al. and Ono Hiroaki with the Faria et al. teachings because improved apparatus to desensitize or sensitize magnetic security strips quicker, ergonomically, without the problems associated with existing apparatus, including, but not limited to destruction of video tapes, interference with electronic equipment, and over heating.

Applicant's arguments with respect to the casing where addressed in the rejection above.

**Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Luis E. Román whose telephone number is 571-272-5527. The examiner can normally be reached on Mon – Fri from 7:15 AM to 3:45 PM.

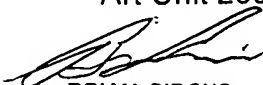
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x 36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from Patent Application Information Retrieval (PAIR) system.

Status information for unpublished applications is available through private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

LR/102906

Luis E. Román  
Patent Examiner  
Art Unit 2836

  
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